

Formal Presentation  
In Response  
To IDEQ Comment # 84

*Idaho National Engineering and Environmental Laboratory*

# ***ICDF Evaporation Pond Lining System Equivalency***

---

*Presented To:  
BBWI, IDEQ, EPA*

---

*November 13, 2001*



# ***Introduction***

- ***Evaporation Pond (EP) Alternatives***
  - ***Recommended Alternative***
- ***Equivalency Analysis for Recommended Alternative***
  - ***Equivalency Criteria***
  - ***Summary and Conclusions of Equivalency Analysis***
- ***Discussion of IDEQ/EPA Comments/Issues***
- ***Summary and Conclusions***

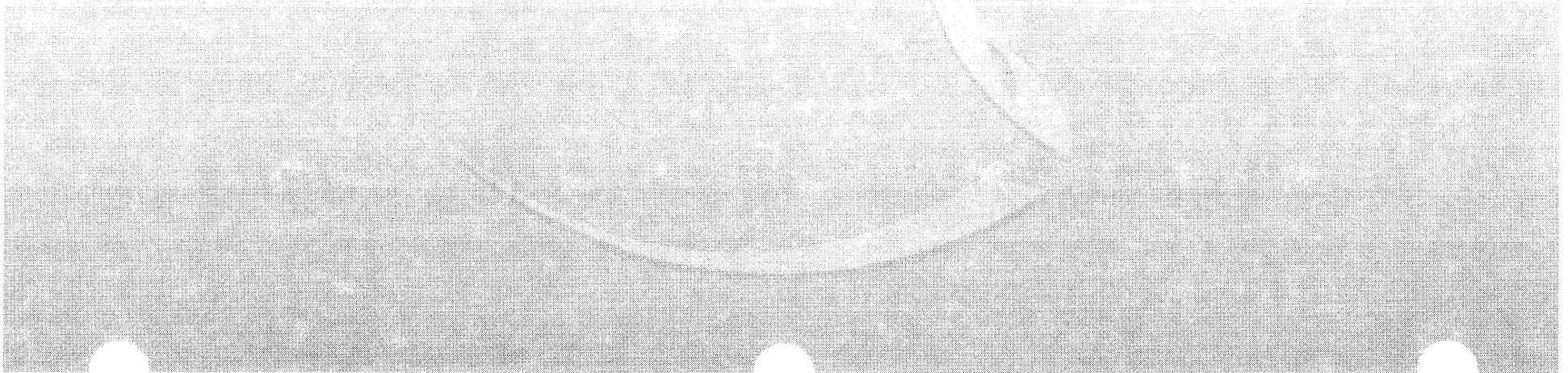
# ***EP Lining System Alternative Evaluation***

- ***Standard Design***
- ***Double GCL***
- ***Single GCL/CCL***
- ***Polystyrene (Geofoam)***
  - ***Goal of alternative is to eliminate ops layer for ease of maintenance and repair and waste minimization***
  - ***All alternatives included a sacrificial geomembrane for extra exposure protection***
  - ***GCL options require agency approval for variance***

[illegible]

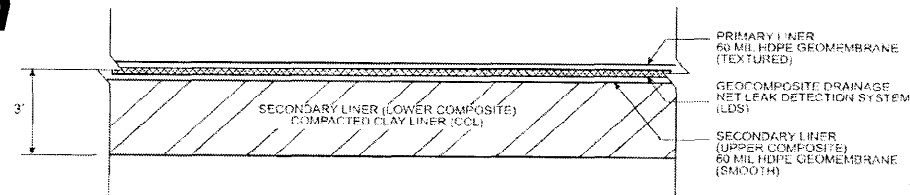
## ***Recommended Alternative***

- ***Double GCL Composite***
  - ***Redundent composite liner provides best long-term leakage protection***
  - ***Most cost-effective alternative considered***

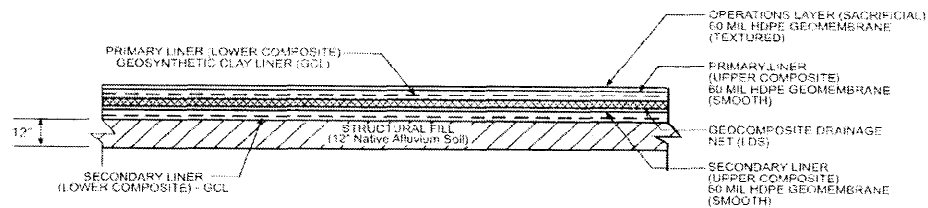


# ***Equivalency Analysis for Recommended Alternative***

- ***Standard Design (40 CFR 264.221)***
- ***Alternative Design***



STANDARD RCRA SUBTITLE C DESIGN



ALTERNATIVE DESIGN

Figure 1-1. Evaporation Pond Lining System Sections.